

REMARKS/ARGUMENTS

Claims 1-10 stand in the present application, claims 1, 2, 9 and 10 having been amended. Reconsideration and favorable action is respectfully requested in view of the above amendments and the following remarks.

In the Office Action, the Examiner has objected to claims 8 and 9 because of specific informalities. With respect to claim 8, the Examiner states the “concatenating” features of claim 8 are already recited in claim 1. Applicants respectfully disagree. As stated at page 8 of the present specification the preferred embodiment of the combining step in Applicants’ invention further comprises concatenating the extracted characteristic features to the respective *M*-dimensional feature vectors. Accordingly, claim 8 is directed to Applicants’ preferred embodiment whereas claim 1 from which it depends more generally recites the combining of the plurality of sets of characteristic features to a respective plurality of *M*-dimensional feature vectors specific to the known class. With respect to claim 9 the Examiner has pointed out that it is missing a period at the end of the claim and Applicants have amended claim 9 in order to correct this deficiency. In view of the above remarks, it is respectfully submitted that the Examiner’s objection to claims 8 and 9 is overcome.

The Examiner has rejected claims 1-10 under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Although Applicants disagree with the Examiner’s § 101 rejection of the claims in order to expeditiously forward the prosecution of this case, independent claims 1, 2, 9 and 10 have all been amended to include an additional element that expressly recites a “final result.” For example, claims 1 and 9 now require “storing the claims model for use in classifying

input data that matches the particular one of the know classes.” Support for these claim amendments can be found, *inter alia*, in the present specification at page 7, lines 14-16. Claims 2 and 10 have been amended to further require “classifying input data in the semantic class that exhibits the *M*-dimensional feature vectors.” Support for these claim amendments can be found, *inter alia*, in the present specification at page 7, lines 17-18. Accordingly, the Examiner’s § 101 rejection of the claims is believed to have been overcome.

The Examiner has rejected claims 1-5 and 8-10 under 35 U.S.C. § 102(e) as being anticipated by Gibbon et al. and has rejected claims 6 and 7 under 35 U.S.C. § 103 as being unpatentable over Gibbon in view of Baudat et al. Applicants respectfully traverse the Examiner’s §§ 102 and 103 rejections of the claims.

Gibbon is directed to a system and method for automated multimedia content indexing and retrieval. As described in the Summary of the Invention portion of the specification at paragraphs 7-9, Gibbon involves “identifying at least one target speaker using the audio and visual components, identifying a topic of the multimedia event using the segmented text topic category models, generating a summary of the multimedia event based on the audio, visual and text components, the identified topic and the identified speaker, and generating a multimedia description of the multimedia event based on the identified target speaker, the identified topic, and the generates summary.”

Nowhere does Gibbon teach or suggest Applicants’ invention of extracting a plurality of sets of characteristic feature vectors from respective portions of the training set of semantically classifiable data of one of the known classes and combining the plurality of sets of characteristic features into a respective plurality of *M*-dimensional

feature vector specific to the known class. Nor does Gibbon et al. teach or suggest analyzing the pluralities of M -dimensional feature vectors for each known class to generate a set of M basis vectors, each being of M -dimensions and then using the set of M basis vectors for mapping each M -dimensional feature vector relating to a particular one of the known classes into a respective M -dimensional feature vector. Finally, Gibbon does not teach or suggest using the M -dimensional feature vectors thus obtained for creating a class model of a particular one of the known classes and then classifying input data that matches the particular one of the known classes.

Applicants respectfully disagree that the Examiner's cited portions of Gibbon disclose the express requirements of the present claims enumerated above. In any event, Gibbon clearly does not teach or suggest the "final result" limitations that have been added to each of the independent claims. For example, Gibbon does not teach or suggest "storing the class model for use in classifying input data . . . " as now required by amended claims 1 and 9. Nor does Gibbon teach or suggest "classifying input data in the semantic class that exhibits the M -dimensional feature vectors" as now required by amended claims 2 and 10. Accordingly, independent claims 1, 2, 9, 10 and their respective dependent claims are believed to patentably define over Gibbon et al.

The Examiner has merely cited Baudat for teaching use of PCA (Principal Component Analysis). Accordingly, Baudat clearly does not solve the deficiencies noted above with respect to Gibbon and, accordingly, claims 6 and 7 are believed to patentably define over the cited references taken either singly or in combination.

Therefore, in view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all of claims 1-10, standing in

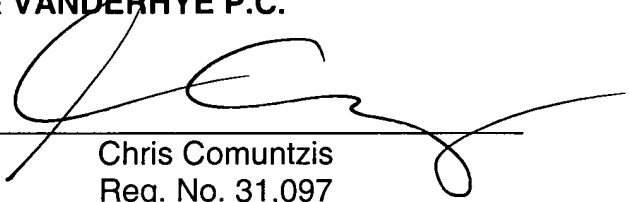
XU et al
Appl. No. 10/521,732
December 7, 2007

the application, be allowed and that the case be passed to issue. If there are any other issues remaining which the Examiner believes could be resolved through either a supplemental response or an Examiner's amendment, the Examiner is respectfully requested to contact the undersigned at the local telephone exchange indicated below.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____


Chris Comuntzis
Reg. No. 31,097

CC:Imr
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100